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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

EWART, JAMES D

ART UNIT PAPER NUMBER

2684

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,650

Applicant(s)

LEYH ET AL.

Examiner

James D Ewart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Multi-mode means many different things. The 18th edition of Newton's telecom dictionary defines multi-mode in terms of fiber optics. A better title might be something like "Cellular telephone with simultaneous CDMA and TDMA communications".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, 8, 10, 15, 16, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Byrne (U.S. Patent No. 5,737,703).

Referring to claim 1, Byrne teaches a multi-mode wireless communications handset (Column 1, Lines 32-34), comprising: a first transceiver having a first receiver, the first receiver is a continuous reception mode receiver (Column 5, Lines 28-29); a first antenna coupled to the first receiver (Column 5, Lines 28-29); a second transceiver having a second receiver (Column 5, Lines 27-28); a second antenna coupled to the second receiver (Column 5, Lines 27-28), the multi-mode wireless communication handset for operating the first receiver in a continuous reception mode and for simultaneously operating the second receiver in a receive mode while the

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first receiver is operating in the continuous reception mode (Column 3, Lines 57-64; Column 6, Lines 44-47).

Referring to claim 2, Byrne further teaches the first transceiver having a corresponding first transmitter, the second transceiver having a corresponding second transmitter, the first and second transmitters connectable to one of the first and second antennas (Column 5, Lines 27-29).

Referring to claims 3, Byrne further teaches the first and second transmitters coupled to the second antenna (Column 5, Lines 27-29).

Referring to claims 8, Byrne teaches a multi-mode wireless communications handset (Column 1, Lines 32-34), comprising: a first transceiver having a first receiver, the first receiver is a continuous reception mode receiver (Column 5, Lines 28-29); a first antenna coupled to the first receiver (Column 5, Lines 28-29); a second transceiver having a second transmitter (Column 5, Lines 27-28); a second antenna coupled to the second transmitter (Column 5, Lines 27-28), the multi-mode wireless communication handset for operating the first receiver in a continuous reception mode and for simultaneously operating the second transmitter in a transmit mode while the first receiver is operating in the continuous reception mode (Column 3, Lines 57-64; Column 6, Lines 44-47).

Referring to claim 10, Byrne teaches a method in a multi-mode wireless communications device having a first transceiver and a second transceiver (Column 1, Lines 32-34), comprising: receiving a first signal with a first receiver of the first transceiver operating in a continuous

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reception mode (Column 5, Lines 28-29), the first receiver coupled to a first antenna (Column 5, Lines 28-29); receiving a second signal with a second receiver of the second transceiver at the same time the first receiver is receiving the first signal (Column 3, Lines 57-64; Column 6, Lines 44-47), the second receiver coupled to a second antenna different than the first antenna (Column 5, Lines 27-28).

Referring to claim 15, Byrne further teaches a the first transceiver includes a first transmitter, the second transceiver includes a second transmitter, connecting the first transmitter and the second transmitter to one of the first and second antennas (Column 5, Lines 27-29).

Referring to claim 16, Byrne teaches a method in a multi-mode wireless communications device having a first transceiver and a second transceiver (Column 1, Lines 32-34), comprising: receiving a first signal with a first receiver of the first transceiver operating in a continuous reception mode (Column 5, Lines 28-29), the first receiver coupled to a first antenna (Column 5, Lines 28-29); transmitting a second signal with a second transmitter of the second transceiver at the same time the first receiver is receiving the first signal (Column 3, Lines 57-64; Column 6, Lines 44-47), the second transmitter coupled to a second antenna different than the first antenna (Column 5, Lines 27-28).

Referring to claim 20, Byrne teaches a method in a multi-mode wireless communications device having a first transceiver and a second transceiver (Column 1, Lines 32-34), comprising: transmitting a first signal with a first transmitter of the first transceiver operating in a continuous transmission mode (Column 5, Lines 28-29), the first transmitter coupled to a first antenna

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(Column 5, Lines 28-29); receiving a second signal with a second receiver of the second transceiver at the same time the first transmitter is transmitting the first signal (Column 3, Lines 57-64; Column 6, Lines 44-47), the second receiver coupled to a second antenna different than the first antenna (Column 5, Lines 27-28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4 and 9 are rejected under 35 USC 103(a) as being unpatentable over Byrne and further in view of Beasley et al. (U.S. Patent No. 6,246,675)

Referring to claims 4 and 9, Byrne teaches the limitations of claims 4 and 9, but does not teach wherein the first receiver is a CDMA receiver, the first transceiver has a CDMA transmitter. Beasley et al. teaches wherein the first receiver is a CDMA receiver, the first transceiver has a CDMA transmitter (Column 1, Lines 9-20). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the art of Beasley et al. of using a CDMA receiver and transmitter to exchange telephone signals between a basestation and an operating mobile cordless telephone handset (Column 2, Lines 7-10).

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4. Claim 5 is rejected under 35 USC 103(a) as being unpatentable over Byrne and further in view of Kitchener et al. (U.S. Patent No. 5,995,065)

Referring to claim 5, Byrne teaches the limitations of claim 5 including the first transmitter coupled to the second antenna (Column 5, Lines 27-29), but does not teach the first antenna is an internal antenna, the second antenna is an external antenna. Kitchener et al. teaches the first antenna is an internal antenna, the second antenna is an external antenna (Column 1, Lines 61-62). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the art of Kitchener et al. wherein the first antenna is an internal antenna, the second antenna is an external antenna to provide the simplest option (Column 1, Line 59).

5. Claim 6 is rejected under 35 USC 103(a) as being unpatentable over Byrne and Beasley et al. and further in view of Pankinaho (U.S. Patent No. 6,140,966)

Referring to claim 6, Byrne and Beasley et al. teach the limitations of claim 5, but do not teach a switch coupling the first and second transmitters and the second receiver to the second antenna. Pankinaho teaches a switch coupling the first and second transmitters and the second receiver to the second antenna (Figure 4). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne and Beasley et al. with the art of Pankinaho of providing a switch coupling the first and second transmitters and the second receiver to the second antenna to provide an antenna arrangement operating on several frequency bands (Column 2, Lines 5-6).

6. Claim 7 is rejected under 35 USC 103(a) as being unpatentable over Byrne and further in view of Masri (U.S. Patent No. 6,480,211)

Referring to claim 7, Byrne teaches a processor coupled to the first and second transceivers (Figure 2; 210), a display and input/ outputs coupled to the processor (Figure 2; 205, 210), but does not teach a video device coupled to the processor. Masri teaches a video device coupled to the processor (Figure 4). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the art of Masri of coupling a video device to the processor to allow users to play video games (Column 2, Line 6)

7. Claims 11, 14 and 21 are rejected under 35 USC 103(a) as being unpatentable over Byrne and further in view of Shaffer et al. (U.S. Patent No. 6,324,409)

Referring to claims 11, 14 and 21, Byrne teaches receiving/transmitting a downlink/uplink first signal with the first receiver/transmitter; receiving/transmitting the second signal with the second receiver/transmitter operating in a non-continuous reception mode at the same time the first receiver/transmitter is receiving/transmitting the downlink/uplink first signal (Column 6, Lines 44-47), but does not teach receiving an uncompressed signal. Shaffer et al. teaches receiving an uncompressed signal (Column 8, Lines 52-53). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to

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combine the art of Byrne with the art of Shaffer et al. of receiving an uncompressed signal to improve signal quality (Column 8, Line 52).

8. Claims 12, 13, 18, 19 and 23 are rejected under 35 USC 103(a) as being unpatentable over Byrne in view of Beasley et al. and further in view of Shaffer et al.

Referring to claims 12, 13, 18, 19 and 23, Byrne teaches the limitations of claims 12, 13, 18 and 19, but does not teach using a CDMA receiver. Beasley et al. teaches using a CDMA receiver. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the art of Beasley et al. of using a CDMA receiver to exchange telephone signals between a base station and an operating mobile cordless telephone handset (Column 2, Lines 7-10). The combination of Byrne and Beasley et al. teach all the limitations of claim 12, but do not teach receiving an uncompressed signal. Shaffer et al. teaches receiving an uncompressed signal (Column 8, Lines 52-53). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne and Beasley et al. with the art of Shaffer et al. of receiving an uncompressed signal to improve signal quality (Column 8, Line 52).

9. Claim 17 and 22 are rejected under 35 USC 103(a) as being unpatentable over Byrne and further in view of Shaffer et al.

Referring to claims 17 and 22, Byrne teaches the limitations of claims 17 and 22, but does not teach transmitting an uncompressed signal. Shaffer et al. teaches transmitting an

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uncompressed signal (Column 8, Lines 52-53). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the art of Shaffer et al. of transmitting an uncompressed signal to improve signal quality (Column 8, Line 52)

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Alberth, Jr. et al. U.S. Patent No. 6,351,653 discloses cellular telephone with simultaneous radio and cellular communications.

Beason et al. U.S. Patent No. 6,373,430 discloses combined global positioning system receiver and radio.

Gillig et al. U.S. Patent No. 4,989,230 discloses cellular cordless telephone.

Gillig et al. U.S. Patent No. 6,141,560 discloses communication device providing dual mode operation.

Koga U.S. Patent No. 6,085,109 discloses wireless telephone equipment operating as a cordless and cellular telephone.

Muralidharan U.S. Patent No. 6,510,310 discloses dual mode phone architecture utilizing a single transmit-receive switch.

Schellinger et al. U.S. Patent No. 5,442,680 discloses dual system cellular cordless radiotelephone apparatus with sub-data channel timing monitor.

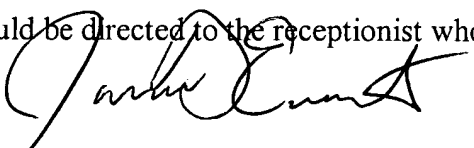
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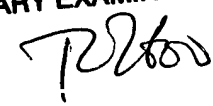
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Smith et al. U.S. Patent No. 5,887,020 discloses multi-band, multi-mode spread-spectrum communication system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D Ewart whose telephone number is (703) 305-4826. The examiner can normally be reached on M-F 7am - 4pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James D Ewart can be reached on ((703)305-4819. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-9508 for regular communications and (703)305-9508 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.


Ewart
February 20, 2003


THANH CONG LE
PRIMARY EXAMINER

2/28/03